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	Application No.	Applicant(s)
Notice of Allowability	09/994,477	ABRARI ET AL.
	Examiner	Art Unit
	Todd Ingberg	2193
The MAILING DATE of this communication app All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85 NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.31	G (OR REMAINS) CLOSED) or other appropriate comm RIGHTS. This application is	n this application. If not included unication will be mailed in due course. THIS
1. This communication is responsive to 6/27/2005:		
2. \square The allowed claim(s) is/are $\underline{2-5,9-17,23-24,28-30,40-44,4}$	<u>7,48</u> .	
3. \boxtimes The drawings filed on <u>27 June 2005</u> are accepted by the B	Examiner.	
 4. Acknowledgment is made of a claim for foreign priority unally All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). 	e been received. e been received in Applicati	on No
* Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.	of this communication to fil MENT of this application.	e a reply complying with the requirements
5. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which giv	nitted. Note the attached EX res reason(s) why the oath o	AMINER'S AMENDMENT or NOTICE OF reclaration is deficient.
6. CORRECTED DRAWINGS (as "replacement sheets") mu	st be submitted.	
(a) \square including changes required by the Notice of Draftsper		w (PTO-948) attached
1) 🗌 hereto or 2) 📗 to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner Paper No./Mail Date	's Amendment / Comment o	r in the Office action of
Identifying indicia such as the application number (see 37 CFR seach sheet. Replacement sheet(s) should be labeled as such in	1.84(c)) should be written on the header according to 37 C	he drawings in the front (not the back) of FR 1.121(d).
7. DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT	sit of BIOLOGICAL MAT	ERIAL must be submitted. Note the
Attachment(s) 1. ☑ Notice of References Cited (PTO-892)	5 🗆 Nation of h	oformal Detaut Application (DTO 450)
 Notice of References Clied (P10-092) DNotice of Draftperson's Patent Drawing Review (PT0-948) 	_	oformal Patent Application (PTO-152) Summary (PTO-413),
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/	Paper No.	/Mail Date <u>8/19/05</u> .
Paper No./Mail Date	<u> </u>	Amendment/Comment
Examiner's Comment Regarding Requirement for Deposit Regarding Requirement for Deposit		Statement of Reasons for Allewance
of Biological Material	9. ☐ Other	TODD INGBERG PRIMARY EXAMINER

EXAMINER'S AMENDMENT

Page 2

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Hans Troesch on August 19, 2005.

The application has been amended as follows:

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- 47. The method of claim [38] 40 , further comprising: displaying an incompleteness in the rule set by auto-creating and displaying rules having combinations of possible if-values not otherwise covered by the rule set; and displaying a logical ambiguity in the rule set by highlighting rules that can produce different actions for the exact same conditions.
- 48. The method of claim [38] 40 , further comprising: displaying a complex rule as multiple simple rules in response to a user request to expand the complex rule~ a complex rule being a rule having a do-not-care if-value for a condition, and each of the multiple simple rules having one of the possible if-values for the condition having the do-not-care value.

Application/Control Number: 09/994,477

Page 3

Art Unit: 2193

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47. The method of claim 40, further comprising:

displaying an incompleteness in the rule set by auto-creating and displaying rules having combinations of possible if-values not otherwise covered by the rule set; and displaying a logical ambiguity in the rule set by highlighting rules that can produce different actions for the exact same conditions.

48. The method of claim 40, further comprising:

displaying a complex rule as multiple simple rules in response to a user request to expand the complex rule a complex rule being a rule having a do-not-care if-value for a condition, and each of the multiple simple rules having one of the possible if-values for the condition having the do-not-care value.

Application/Control Number: 09/994,477

Art Unit: 2193

REASONS FOR ALLOWANCE

2. The following is an examiner's statement of reasons for allowance:

As per independent claims 2, 9 and 40

Prior art of record fails to disclose the specifics of the user interface as found in independent claims. The closest prior art is:

- A. Visual Modeling Technique Object Technology Using Visual Programming by Daniel Tkach et al, pages 33 334 shows the implementation of rules in a much different visual format.
- B. Principles of Object Oriented Analysis and Design by James Martin on pages 146 149 shows the under lying concepts and screen shots of the Rules Editor a commercial product by IntelliCorp.
- C. Template Software Reference Template Software shows several different user interfaces with the rules editor.

Template also has a build your own Graphical User Interface (manual not made of record). Despite the flexibility of the development tool of Template the limitations as depicted below are supported in figures 17 and 18 as supported on page 18 of the Specification.

Distinguishing limitations are the combination of the following:

"...to: display the editable lists in a matrix structure of four quadrants, wherein an editable list of condition terms and an editable list of action terms are displayed in adjacent quadrants, and the editable list of if-values and the editable list of then-values are displayed in adjacent quadrants; and use adjacency of if-values and then-values to represent a conditional rule implementation, where when the specified conditions are true then the corresponding actions are executed."

As per claims 23, 25, 30, the limitation of using "a value of do-not-care" within a rule appears novel over prior art. The Examiner considered rejection with a "enum" data type. However, on page 16 of the Specification this feature is clearly build into the environment and invoked with a dash. An "enum" data type requires a programmer to define the user defined scalar.

As per claim 26, the editable list of conditions for interacting with business rules maintain an edible list of actions where the conditions and actions are linked by the combination of editable lists of conditional values (if-values) and editable list of then-values. The if-values and then-values are linked in the displayed lists. The display of a value set for each assignment action results in the values in the value set contain all the possibilities defined. The use of "pull-down"

Page 5

Art Unit: 2193

lists in graphical programming is well known to one of ordinary skill in the art. The use of constructing the constructs ("if-values" and "then-values") of a business rule was not present in the prior art of record. In combination, with the linkages as described above the combination is deemed non obvious over prior art of record.

As per claim 28 - the prior art of record fails to teach the limitation of a "display an incompleteness in the rule set by auto-creating and displaying rules having combinations of possible if-values not otherwise covered by the rule set." The Template reference teach how to handle ambiguity but not incomplete rules.

As per claim 29 - the prior art fails to teach "display a logical ambiguity in the rule set by highlighting rules that can produce different actions for the exact same conditions." The Template reference teaches a copy of flows with a junction. Although, this is an action, it is not an action as a result of a rule.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Correspondence Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Todd Ingberg whose telephone number is (571) 272-3723. The examiner can normally be reached on during the work week..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 09/994,477

Art Unit: 2193

Page 6

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)

Todd Ingberg V Primary Examiner Art Unit 2193